

Abstract

The invention relates to a device and a method for the axially aligned joining of long parts, in particular rails, by friction welding.

It is provided according to the invention that the friction welding device (A) features clamping means (2, 2') for the part ends (11, 11') that can be positioned against one another and at least one clamping means can be moved relative to the opposite one, parallel to the part cross-sectional plane (12, 12') in an axially divergent manner and can be positioned in an axially aligned manner to the part with freedom of movement.

The method according to the invention is characterized in that in a heating step the cross-sectional surfaces (12, 12') to be joined of the part ends (11, 11') are pressed against one another and at least one part end is moved in an axially divergent manner relative to the opposite one and in this manner the face areas are brought to an increased temperature at which an axially aligned alignment of the parts (1, 1') takes place with free movement of the same and the weld area is placed under increased pressure for the all-over metallic bonding of the part ends (11, 11').